

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

This declaration is of the following type:

- ☒ original
- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part

INVENTORSHIP IDENTIFICATION

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

TITLE OF INVENTION

***GAPFILL PROCESS USING A COMBINATION OF SPIN-ON-GLASS DEPOSITION AND
CHEMICAL VAPOR DEPOSITION TECHNIQUES***

SPECIFICATION IDENTIFICATION

The specification of which:

- ☒ is attached hereto
- ☐ was filed on _____, under Application No. _____, executed on even date herewith; or
- ☒ Express Mail No. _____ (as Application No. not yet known) and was amended on _____ (if applicable)
- ☐ was described and claimed in PCT International Application No. _____ filed on _____ and as amended under PCT Article 19 on _____.

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

- ☒ In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.

PRIORITY CLAIM (35 U.S.C. §119)

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

- ☒ No such applications have been filed.
☐ Such applications have been filed as follows:

- A. Prior foreign/PCT application(s) filed within 12 mos. (6 mos. for design) prior to this application, and any priority claims under 35 U.S.C. §119

<u>Country/PCT</u>	<u>Application No</u>	<u>Date Filed</u>	<u>Priority Claimed</u>
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

- B. All foreign application(s), if any, filed more than 12 mos. (6 mos for design) prior to this U.S. application

Country:
Application No:
Filing date:

PRIORITY CLAIM (35 U.S.C. §120)

I hereby claim the benefit under Title 35, United States Code, §120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

- ☒ No such applications have been filed
☐ Such applications have been filed, as follows:

<u>Application No.</u>	<u>Filing Date</u>	<u>Status</u>
		<u>Patented</u> <u>Pending</u> <u>Abandoned</u>

POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa	Registration No. 25,610
Joseph Bach	Registration No. 37,771
Lawrence Edelman	Registration No. 25,226
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Robert W. Mulcahy	Registration No. 25,436
Robert C. Colwell	Registration No. 27,431
William L. Shaffer	Registration No. 37,234
Chun-Pok Leung	Registration No. 41,405
Patrick R. Jewik	Registration No. 40,456
Kent J. Tobin	Registration No. 39,496


Send correspondence to: Direct telephone calls to:

Patent Counsel, MS/2061	William L. Shaffer
Legal Affairs Dept.	(650) 326-2400
Applied Materials, Inc.	
P.O. Box 450A	
Santa Clara, CA 95052	

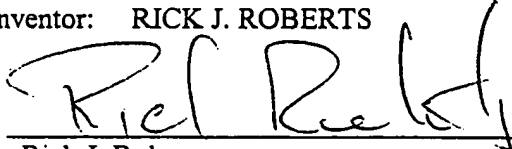
DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of sole or first inventor: ZHENJIANG CUI

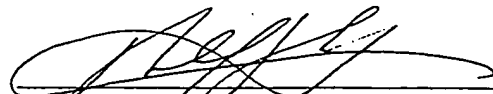
Inventor's signature:  Date: 04/30/03
Zhenjiang Cui Country of Citizenship: Peoples Republic of China

Full name of second inventor: RICK J. ROBERTS

Inventor's signature:  Date: 4/30/03
Rick J. Roberts Country of Citizenship: United States

Full name of third inventor: MICHAEL S. COX

Inventor's signature:


Michael S. Cox

Date:


April 30, 2003

Country of Citizenship:

United States

Full name of fourth inventor: JUN ZHAO

Inventor's signature:


Jun Zhao

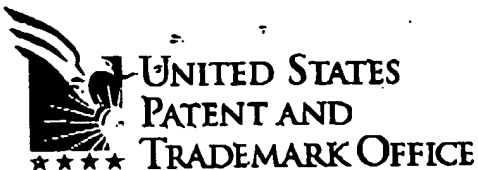
Date:

4/30/03

Country of Citizenship:

United States

(Declaration ends with this page)



REC'D OCT 28 2003

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D8M

OCTOBER 20, 2003

PTAS

Chief Financial Officer and Chief Administrative Officer
Washington, DC 20231
www.uspto.gov

APPLIED MATERIALS, INC.
ROBERT W. MULCAHY
P.O. BOX 450A, M/S 2061
LEGAL AFFAIRS DEPARTMENT
SANTA CLARA, CA 95052

COMPUTER EXAMINED
OCT 29 2003



UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/06/2003

REEL/FRAME: 014055/0700
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
CUI, ZHENJIANG

DOC DATE: 04/30/2003

ASSIGNOR:
ROBERTS, RICK J.

DOC DATE: 04/30/2003

ASSIGNOR:
COX, MICHAEL S.

DOC DATE: 04/30/2003

ASSIGNOR:
ZHAO, JUN

DOC DATE: 05/05/2003

ASSIGNEE:
APPLIED MATERIALS, INC.
P.O. BOX 450A
LEGAL AFFAIRS DEPARTMENT
SANTA CLARA, CALIFORNIA 95052

SERIAL NUMBER: 10431031
PATENT NUMBER:

FILING DATE: 05/06/2003
ISSUE DATE:

014055/0700 PAGE 2

KIMBERLY WHITE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

05-15-2003

Attorney Docket No. A8110/T51000

FORM PTO-1595
(Rev. 6-93)

102448385

U.S. Department of Commerce
Patent and Trademark Office

To the Honorable Commissioner for Patents

1. Name of conveying party(ies)

Zhenjiang Cui
Rick J. Roberts
Michael S. Cox
Jun Zhao

Execution Date

04/30/03
04/30/03
04/30/03
05/05/03

2. Name and address of receiving party(ies)

Name: Applied Materials, Inc.

Internal Address: Legal Affairs Department

Street Address: P.O. Box 450A

City: Santa Clara State: CA ZIP: 95052

Additional names and addresses attached? ☐ Yes ☒ NoAdditional name(s) of conveying parties attached? ☐ Yes ☒ No.

3. Nature of conveyance:

- ☒
- Assignment
- ☐
- Merger
-
- ☐
- Security Agreement
- ☐
- Change of Name
-
- ☐
- Other:

Execution Date: SEE ABOVE

4. Application Number(s) or Patent Numbers.

If this document is being filed together with a new application, the execution date of the application is: 05-06-03

A. Patent Application No(s):

B. Patent No(s):

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name:

Patent Counsel
APPLIED MATERIALS, INC.
Legal Affairs Department
P.O. Box 450A, M/S 2061
Santa Clara, California 95052

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00

☐ Enclosed ☒ Charge Fees to Deposit Account☒ Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account.

8. Deposit account number: 50-1074

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true copy of the original document.

Robert W. Mulcahy
Name of Person Signing

Signature

Date

Atty Reg. No. 25,436

Total number of pages including cover sheet, attachments and document: 3

10. Change Correspondence Address to that of Part 5?

☒ Yes ☐ No

OMB No. 0651-0011 (exp. 4/94)

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Mail documents to be recorded with required cover to:

MS Assignment Recordation Services
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Alexandria, VA 22313-1450

05/14/2003 TBLA21

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ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses
of Inventors:

1)	Zhenjiang Cui 7070 Rainbow Drive, #9 San Jose, CA 95129 United States	2)	Rick J. Roberts P.O. Box 70817 Sunnyvale, CA 94086 United States
3)	Michael S. Cox 40 Center Street Davenport, CA 95017 United States	4)	Jun Zhao 11764 Ridge Creek Court Cupertino, CA 95014 United States

(hereinafter referred to as Assignors), have invented a certain Invention entitled:

GAPFILL PROCESS USING A COMBINATION OF SPIN-ON-GLASS DEPOSITION AND CHEMICAL VAPOR DEPOSITION TECHNIQUES

for which application for Letters Patent in the United States was filed on , under Application No. Unassigned, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

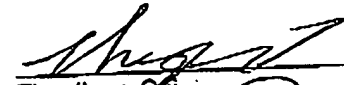
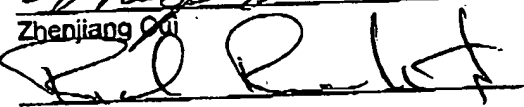
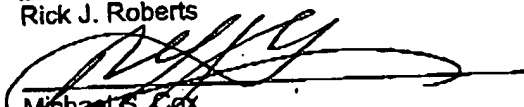
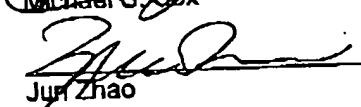
2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for

- prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any application therefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.

4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1) <u>April 30</u> , 2003	 Zhenjiang Qiu
2) <u>30 April 03</u> , 2003	 Rick J. Roberts
3) <u>April 30</u> , 2003	 Michael S. Cox
4) <u>5/5/03</u> , 2003	 Jun Zhao